

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Jeffery P. Aiello

Serial No.: 10/619,163

Filed: 7/10/2003

Title: METHOD AND APPARATUS

REDUCING OFF TRACK HEAD

MOTION DUE TO DISK

VIBRATION IN A HARD DISK DRIVE THROUGH THE HEAD

GIMBAL ASSEMBLY

Attorney Docket No.: 139-024U

Group Art Unit: Not yet known

Examiner: Not yet known

Mail Stop IDS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

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This Information Disclosure Statement is submitted:

X	under 37 CFR 1.97(b), or (Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
	under 37 CFR 1.97(c) together with either a: Certification under 37 CFR 1.97(e), or a \$240.00 fee under 37 CFR 1.17(p), or (After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
	under 37 CFR 1.97(d) together with a: Certification under 37 CFR 1.97(e), and a petition under 37 CFR 1.97(d)(2)(ii), and a \$130.00 petition fee set forth in 37 CFR 1.17(i)(1). (Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

X Applicant(s) submit herewith Form PTO/SB/08A and PTO/SB/08B-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted

GREGORY SCOTT SMITH
Attorney/Agent for Applicant(s)

Reg. No. 38,309

Date: November 19, 2003

Telephone No.: (510) 742-7417

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop IDS, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: November 19, 2003

Typed Name: Evanjelin M. Dasalla

Signature:

PTO/SB/08A (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

RADEM Substitute for form 1449A/PTO				Co	Complete if Known			
				Application Number	10/619,163	_		
INFORMATION DISCLOSURE				Filing Date	7/10/2003			
;	STATEMENT BY APPLICANT		First Named Inventor	Oh et al.				
				Art Unit	Not yet known			
	(use as many sheets	as necessa	ry)	Examiner Name	Not yet known			
Sheet	<u> </u>	of	2	Attorney Docket Numbe	r 139-024U	_		

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Document Number Number - Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	ļ	US-5,999,369	12-07-1999	Shimizu et al.				
		US-6,061,205	05-09-2000	Finegan				
		US-6,088,192	07-11-2000	Riener et al.				
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶	

Examiner		Date	
Signature	<u></u> ,	Considered	1

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (05-03)
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RASCOStitute for form 1449B	/PTO		mplete if Known
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		Group Art Unit	Not yet known
(use as many shee	ets as necessary)	Examiner Name	Not yet known
Sheet 2	of 2	Attorney Docket Number	139-024U

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Aurthor unknown, Design of a Disk Drive Servo: A Case Study, 37 pages, Chapter 14.	
	2	LI, YUNFENG and HOROWITZ, ROBERTO, Active Vibration Control of a PZT Actuated Suspension in Hard Disk Drives, date unknown, 6 pages.	
***************************************	3	MCALLISTER, S. JEFFREY, The Effect of Disk Platter Resonances on Track Misregistration in 3.5 Inch Disk Drives, IEEE Transactions on Magnetics, May 1996, 5 pages, volume 32, Number 3.	
	4	HAO, QI et al., TMR Online Optimization Using Quasi-Newton Method for HDD Servo Systems, Procedings of the American Control Conference, June 2000, 55 pages, Chicago, Illinois.	
	5	GOH, B. TECK et al., Design and Implementation of a Hard Disk Drive Servo System Using Robust and Perfect Tracking Approach, IEEE Transaction on Control Systems Technology, March 2001, 13 pages, Volume 9, Number 2.	
	6	LI, YUNFENG and HOROWITZ, ROBERTO, Mechatronics of Electrostatic Microactuators for Computer Disk Drive Dual-Stage Servo Systems, IEEE/Asme Transactions of Mechatroics, June 2001, 11 pages, Volume 6, Number 2.	
	7	LI, YUNFENG and HOROWITZ, ROBERTO, Active Suspension Vibration Control with Dual Stage Actuators in Hard Disk Drives, Proceedings of the American Control Conference, June 25-27, 2001, 6 pages.	
	8	Y. LI, R. HOROWITZ, Design and Testing of Track-Following Controllers for Dual-Stage Servo Systems with PZT Actuated Suspensions, Microsystem Technologies 8 (2002), 12 pages, Springer-Verlag 2002.	
	9	Web Control Articles, 164 pages, 10/10/02.	

Examiner	Date	
Signature		
Signature	Considered	

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